



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,775	10/20/2003	Han-Ting Chang	2002-061R1 (189861/US/2)	4543
46138 7590 08/03/2009 Fulbright & Jaworski L. L. P. Attn: MNIPDOCKET 600 Congress Avenue Suite 2400 Austin, TX 78701				
EXAMINER				
CHEUNG, WILLIAM K				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
08/03/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/689,775  
Filing Date: October 20, 2003  
Appellant(s): CHANG ET AL.

Ronald A. Krasnow  
(Registration No. 33,321)  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed April 20, 2009 appealing from the Office action mailed June 30, 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,395,850	Charmot et al.	5-2002
6,767,968	Liu et al.	7-2004

6,569,969

Charnot et al.

5-2003

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-9, 12-19, 22, 23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,395,850. Although the conflicting claims are not identical, they are not patentably distinct from each other because the invention of claims 1-20 of U.S. Patent No. 6,395,850 fully encompasses the invention of Claims 1-9, 12-19, 22, 23 of instant application.

3. Claims 1-9, 12-19, 22, 23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 8-16, 20-26 of

U.S. Patent No. 6,767,968. Although the conflicting claims are not identical, they are not patentably distinct from each other because the invention of claims 8-16, 20-26 of U.S. Patent No. 6,767,968 fully encompasses the invention of Claims 1-9, 12-19, 22, 23 of instant application.

4. Claims 1-9, 12-19, 22, 23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,569,969. Although the conflicting claims are not identical, they are not patentably distinct from each other because the invention of claims 1-13 of U.S. Patent No. 6,569,969 fully encompasses the invention of Claims 1-9, 12-19, 22, 23 of instant application.

Appellant's arguments filed April 20, 2009 have been fully considered but they are not persuasive. Appellants argue that the instantly claimed invention is not anticipated by claims 1-20 of U.S. Patent No. 6,395,850, claims 8-16, 20-26 of U.S. Patent No. 6,767,968, and claims 1-13 of U.S. Patent No. 6,569,969 because claims 1-20 of U.S. Patent No. 6,395,850, claims 8-16, 20-26 of U.S. Patent No. 6,767,968, and claims 1-13 of U.S. Patent No. 6,569,969 are silent on the specific type of monomers in the presence of dithio control agents being claimed. However, the examiner disagrees because the monomers as claimed are also not specific, and rather broad in teachings. Appellants must recognize that monomers are generally either hydrophilic or

hydrophobic, and olefins are generally hydrophobic. In view of such limited species, the ODP set forth is proper.

Regarding appellants argument that the claimed method invention involves making a block copolymer which can modify the surface tension of an olefinic substrate by an amount of at least 10 mN/m with the claimed block copolymer, appellants fail to recognize that the claimed "modify the surface tension of an olefinic substrate by an amount of at least 10 mN/m with the claimed block copolymer" is a property that can be inherent to the copolymers of claims 1-20 of U.S. Patent No. 6,395,850, claims 8-16, 20-26 of U.S. Patent No. 6,767,968, and claims 1-13 of U.S. Patent No. 6,569,969. Therefore, the ODP set forth is proper.

Regarding appellants' argument that the examiner relies on the specification of the '969 patent to fill in any missing gaps is improper, Appellants fail to recognize that that it is proper for the examiner to use additional references or the specification of '969 patent to set forth an ODP rejection.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-9, 12-19, 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Charmot et al. (US 6,395,850).

Charmot et al. (col. 6, line 46 to col. 8, line 25; col. 15, claim 12) clearly disclose a dithio-containing control agent for preparing a block copolymer (col. 11, line 48 to col. 12, line 35; col. 16, claim 20). Further, Charmot et al. (col. 9, line 65 to col. 10, line 57) disclose that the block copolymerization process of Charmot et al. involves a long list of hydrophilic and olefinic comonomers. Therefore, the polymerization process of Charmot et al. fully discloses the process as claimed. Regarding the claimed feature "block copolymer can change the surface tension of an olefinic substrate by an amount of at least 10 mN/m", the examiner has a reasonable basis to believe that this particular feature is inherently possessed in Charmot et al. in view of the substantially identical composition disclosed in Charmot et al. and the composition employed in the claimed invention. Claims 1-9, 12-19, 22 are anticipated.

#### **(10) Response to Argument**

Appellant's arguments filed April 20, 2009 have been fully considered but they are not persuasive.

Appellants (Appeal Brief, page 3) argue that Charmot et al. (col. 9, line 65 to col. 10, line 57) lists a large number of monomers that can be polymerize with dithio compounds, appellants fail to recognize that all the monomer listed are categorically olefinic monomers that are either hydrophilic or hydrophobic. Because appellants' claim 1 lacks specificity, the rejection of claim 1 is proper. Regarding the specific monomers claimed in claims 2-5, 13-15, appellants must recognize that the list of monomers

disclosed in Charmot et al. (col. 10, line 2, 56-57) explicitly disclose the monomeric species as claimed.

Regarding appellants' argument that the teachings in the working examples of Charmot et al. only involve homopolymerization, appellants must recognize that the teachings of a prior art is not limited to its working examples. The background teachings and the non-preferable embodiments of a prior art can be used as teaching materials. Regarding appellants' argument that the examples in Charmot et al. only involve homopolymerization, appellants fail to recognize that Charmot et al. (col. 14-16, claims 1-20, particular claim 7) also teach a great deal on the copolymerization using the disclosed dithio-containing control agent.

Regarding appellants' argument (Appeal Brief, page 4) that claim 1 should be allowable because claim 1 recites a positive method step of modifying the surface tension of an olefinic substrate by an amount of at least 10 mN/m with the block copolymer. However, the examiner disagrees because "modifying the surface tension of an olefinic substrate by an amount of at least 10 mN/m with the block copolymer" is a property inherently possessed by the claimed "reacting said at least one hydrophilic block with an olefin monomer capable of free radical polymerization". Since Charmot et al. (col. 9, line 65 to col. 10, line 57) clearly possess the claimed "reacting said at least one hydrophilic block with an olefin monomer capable of free radical polymerization" feature, the examiner has a reasonable basis to believe that the claimed "modifying the



surface tension of an olefinic substrate by an amount of at least 10 mN/m with the block copolymer" is inherently possessed in Charmot et al. in view of the substantially identical monomeric components of the block copolymers disclosed in Charmot et al. and as claimed.

Regarding appellants' argument that the examiner fails to address the recited "at least partially hydrogenating said random block" of claims 6, 16, and 22, however, appellants fail to recognize that the recited "at least partially hydrogenating said random block" of claims 6, 16, and 22 as written is a result or property that is inherent to the copolymers from the claimed steps of "polymerizing a hydrophilic monomer under free radical polymerization conditions in the presence of a dithio-containing control agent to create said at least one hydrophilic block and subsequently reacting said at least one hydrophilic block with at least one olefinic monomer and one monomer that is hydrophilic with respect to the olefinic monomer". Therefore, the examiner has a reasonable basis to believe that the claimed "at least partially hydrogenating said random block" carries very little weight in patentability. Appellants must recognize that claims 6, 16, and 22 are completely silent on a process comprising a diolefin. Appellants must recognize the polymerization of olefinic monomers inherently will result polymers with no unsaturation (similar to a hydrogenated polymer). Therefore, the recited "at least partially hydrogenating said random block" could only be result from the copolymerization of the hydrophilic block in the presence of an unique comonomer. The rejection of claims 6, 16, and 22 is proper.

Regarding appellants' argument that the claimed method invention involves a specific order of the polymerization of monomers, appellants fail to recognize that the two steps polymerization process as claimed is a very simple process which is typical to most polymerization processes for making a block copolymer with the sequential addition of comonomers.

In view of the reasons set forth above, the examiner has a reasonable basis to maintain the rejection set forth.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/William K Cheung/  
Primary Examiner, Art Unit 1796

William K. Cheung, Ph. D.  
Primary Examiner  
Conferees:

David Wu (SPE)

/David Wu/

Supervisory Patent Examiner, Art Unit 1796

/Gregory L Mills/

Supervisory Patent Examiner, Art Unit 1700

